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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,445	12/13/2005	Miki Sudo	09792909-6562	8857
26263 7590 09/06/2007 SONNENSCHN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			EXAMINER CHEN, VIVIAN	
			ART UNIT 1773	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/560,445		SUDO ET AL	
	Examiner		Art Unit	
	Vivian Chen		1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claim 8 has been cancelled by Applicant.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

JP 2000-242760 (JP '760),

in view of JONES ET AL (US 6,843,422).

JP '760 discloses multilayer card structures comprising a symmetrical arrangement of a central thermally fusible core layer and biaxially oriented film layers (e.g., polyethylene terephthalate) with a typical thickness of 0.1 mm on both exterior surfaces, wherein the deviation (i.e., difference) in the orientation axes of the two oriented surface film layers is small (e.g., about 10 degrees). The card further contains an IC component comprising a module and chip. The card structure is formed by laminating the appropriately aligned oriented films to both the front and back of a core layer to form a symmetrical structure (entire document, e.g., Abstract; paragraphs 4, 17-18, 20-21, 25, 30) However, the reference does not explicitly disclose the presence of a recording layer.

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JONES ET AL discloses that it is well known in the art to apply image recording layers to the outer surfaces of multilayer card structures in order to improve adhesion of indicia to polyester substrates. (line 47, col. 25 to line 25, col. 26)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a known functional coating such as a recording layer on the surface of the card structures of JP '760 in order to facilitate the application of information on the card.

3. Claims 6, 7, 9-10 is rejected under 35 U.S.C. 103(a) as being unpatentable over:
JP 2000-242760 (JP '760),
in view of JONES ET AL (US 6,843,422),
as applied to claim 1 above,
and further in view of OHTA ET AL (US 2003/0062420),
and further in view of SUGIE ET AL (US 6,333,112).

OHTA ET AL discloses that it is well known in the art to use two core layers to encapsulate an IC component within a multilayer card structure, wherein the core layer material comprises PETG copolyesters in order to form a durable card structure. The reference further discloses that it is well known in the art to apply reversible thermosensitive imaging layer on the exterior surface in order to record information onto the card. (Figure 7-8; paragraph 51, 57)

SUGIE ET AL discloses that it is well known in the art to use blends of 10-90 wt% copolyester and 10-90 wt% polycarbonate, wherein the copolyester is as recited in claim 10. as a substrate material for cards because its good heat resistance and thermal fusibility. (line 12-17, col. 2; line 5-40, col. 10)

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a known PETG-based blend compositions as core layer(s) materials in order to form a card with improved durability and physical properties. It also would have been obvious to apply a known recording layer on the cards in order to facilitate the application of information on the card.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 31, 2007



Vivian Chen
Primary Examiner
Art Unit 1773